

8. *Asio magellanicus virginianus* (Gmelin). "Southern Canada and eastern United States, west to Ontario, Wisconsin, Iowa, and eastern Texas; accidental in Ireland."
9. *Asio magellanicus algistus* Oberholser. "Northwest coast region of Alaska."
10. *Asio magellanicus occidentalis* (Stone). "Western United States, from Minnesota and Kansas to Nevada, southeastern Oregon, Utah, and Montana; south in winter to Iowa."
11. *Asio magellanicus wapacuthu* (Gmelin). "Northern Canada, from Hudson Bay to the Valley of the Mackenzie River; south in winter to the northern United States, from Idaho to Wisconsin."—J. A. A.

Snodgrass and Heller on the 'Birds of the Galapagos Archipelago.'¹—This new revision of the birds of the Galapagos Archipelago recognizes 80 species and 30 additional subspecies. The synonymy, and the bibliographical references that refer especially to the Galapagos, are given for each, with its range, and especially its distribution and manner of occurrence in the Archipelago, together with biographical observations, often extended, notes on the color of the naked parts, etc., and many tables of measurements of large series of specimens. The authors follow rather closely the nomenclature of Rothschild and Hartert, using trinomials for insular forms when their variations overlap, "regardless of the possibility or impossibility of their interbreeding." The *Geospiza* group, sometimes separated into four or more genera, is treated as a genus with three subgenera. Six different phases of plumage are described, and denominated 'stages,' and numbered I to VI; three of these are found to coincide with the differences in the form of the bill, on which the subgeneric groups have been principally based, while the other three are immature phases characterizing young birds, shared unequally by the members of the several subgenera. The discussion of this group, with the voluminous but important notes on habits, song, etc., occupies 75 pages, or nearly one half of the entire memoir.

Although Snodgrass and Heller have described (in previous papers) a number of new species and subspecies from the Galapagos, the number of forms (110) now recognized exceeds by two only the number given by Rothschild and Hartert in 1899,² quite a number of the 14 added by these authors being here reduced to synonyms.

¹ Papers from the Hopkins-Stanford Galapagos Expedition, 1898-1899. XVI. Birds. By Robert Evans Snodgrass and Edmund Heller. Proc. Washington Acad. Sci., Vol. V, pp. 231-372. Jan. 28, 1904.

² For a notice of Rothschild and Hartert's 'Review of the Ornithology of the Galapagos Islands,' see Auk, XVII, July, 1900, pp. 300-303; for a notice of Ridgway's 'Birds of the Galapagos Archipelago' see *ibid.*, XIV, July, 1897, pp. 329, 330.

This is the third extended memoir on Galapagos Islands birds published within the last seven years, each based on extensive material, and each marking an important advance in our knowledge of this peculiarly interesting ornithology. In the memoir now under review there is no reference to previous work in the same field, beyond the bibliographical citations under the species and in the general text. Some reference to the general history of the subject, and some statement of their opportunities and resources, and of the results reached, would have been a good addition to this important contribution to the literature of Galapagan ornithology.—J. A. A.

Shufeldt on the Osteology of the Halcyones and Limicolæ.—In the 'American Naturalist' for October, 1903, Dr. Shufeldt devotes considerable space to a consideration of the Kingfishers,¹ with reference to their osteology and systematic position. It is in the main an amplification of his paper on the 'Osteology of *Ceryle alcyon*,' published in 1884 (Journ. Anat. and Phys., XVIII, 1884, pp. 279-294, pl. xiv), with the same illustrations, here reproduced in half-tone. The structure of this species is compared with allied forms, but not much new light is thrown upon the relationships of the group, nor is any very positive opinion advanced as to its nearest affinities, though believed by the author to be most nearly related to the Galbulidæ, an opinion shared by previous writers on the subject.

Respecting his paper on the osteology of the Limicolæ,² his own opinion is to the effect that "it is probably the most extensive contribution to the osteology and taxonomy of the Limicolæ that has appeared from the pen of any writer on the subject up to the present time." The 'skeletalogy' of each of the principal types is described in considerable detail, the paper closing with a synopsis of their leading osteological characters, and a review of their affinities. The Limicolæ are regarded as a suborder of the Charadriiformes, and are divided into eight families, which correspond to those adopted in the A. O. U. Check-List, except that the subfamily Arenariinæ of the Check-List is given the rank of a family.—J. A. A.

Evans's 'Turner on Birds.'³—This is a republication, with translation

¹ On the Osteology and Systematic Position of the Kingfishers. (Halcyones.) By R. W. Shufeldt. Amer. Nat., Vol. XXXVII, Oct. 1903, pp. 697-725, figs. 1-3.

² Osteology of the Limicolæ, By Dr. R. W. Shufeldt. Ann. Carnegie Mus., Vol. II, 1903, pp. 15-70, pl. i, and 27 text figures.

³ Turner on Birds: [a short and succinct history] of the [principal birds noticed by Pliny and Aristotle,] first published by [Doctor William Turner, 1544.] Edited, with Introduction, Translation, Notes, and Appendix, [by] A. H. Evans, M. A. [Clare College, Cambridge.] Cambridge: [At the University Press] 1903—Svo, pp. i-xviii, 1 l. (transcript of original title page) + pp. 1-223.